

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **DMP1** polyclonal antibody

Catalog: BS7995 Host: Rabbit Reactivity: Human, Mouse, Rat

### **BackGround:**

DMP-1 (dentin matrix protein-1), also known as dentin matrix acidic phosphoprotein-1, is a member of the small integrin ligand N-linked glycoprotein family. It is important for the mineralization of bone and dentin. DMP-1 is expressed in bone, tooth and hypertrophic cartilage. It is synthesized by preosteoblasts and contains a large number of acidic domains. DMP-1 localizes to the nucleus of undifferentiated osteoblasts where it functions as a transcriptional regulator for osteoblast-specific gene activation and induces osteoblast differentiation. During osteoblast maturation, DMP-1 undergoes a conformational change and becomes phosphorylated by casein kinase II in response to an influx of calcium ions to the nucleus. DMP-1 is then exported to the extracellular matrix (ECM) where it regulates the nucleation of hydroxyapatite and the formation of calcified tissue. DMP-1 is proteolytically processed into N- and C-terminal fragments in the ECM of bone and dentin. The protein has also been identified in bone as a high molecular weight proteoglycan comprised of the N-terminal DMP-1 fragment and chondroitin sulfate. The loss of DMP-1 can result in hypomineralized bone.

#### **Product:**

1mg/ml in PBS with 0.1% Sodium Azide, 50% Glycerol.

## **Molecular Weight:**

~ 55 kDa

### **Swiss-Prot:**

## Q13316

## **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

## **Applications:**

WB 1:500 - 1:2000

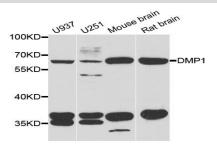
### **Storage&Stability:**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at -20  $\mathrm{C}$  long term. Avoid freeze-thaw cycles.

### **Specificity:**

DMP1 polyclonal antibody detects endogenous levels of DMP1 protein.

### **DATA:**



WesternBlot (WB) analysis of DMP1 polyclonal antibody

## Note:

For research use only, not for use in diagnostic procedure.

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